CELOSIA TRIGYNA L. (AMARANTHACEAE), A SPECIES NEW TO CONTIGUOUS UNITED STATES

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The only species of Celosia previously known to occur in contiguous United States were C. palmeri S. Watson from western texas (Correll & Johnston, 1970), C. nitida Vahl from southern Florida (Long & Lakela, 1976) and southern Texas (Correll & Johnston, 1970), and C. argentea L., the commonly cultivated cockscomb native to South America, which is occasionally encountered as an escape in Texas (Correll & Johnston, 1970), North Carolina (Radford, et al., 1968), Missouri (Steyermark, 1963), and perhaps can be expected elsewhere. Now to this list of three species must be added C. trigyna, naturalized in central Florida. Celosia trigyna is native and widespread in tropical Africa, also occurring in Arabia and the Malagasy Republic (Keay, 1954). This species has apparently been in Florida for some time since the oldest herbarium specimen is dated 1931 and was made from a plant grown from seed collected in Pinellas County [DeBusk s.n. (FLAS)]. Since then, additional collections have been made in Pinellas as well as in Lake, Pasco, and Polk Counties in Florida.

Celosia trigyna has been confused with the native C. nitida in Florida. However, it can readily be distinguished by the characters in the following key to the two Florida species.

Celosia nitida is a hardwood hammock species confined to the southern counties in Florida. Collections have been seen from Dade, Lee, and Monroe Counties. On the other hand, C. trigyna occurs in central peninsular Florida. It is a weedy species most commonly encountered in cultivated fields and orange groves. It is an aggressive species and produces relatively large amounts of viable seed, thus has the potential of becoming a troublesome weed in central Florida.

The following collections of *C. trigyna* from Florida have been examined: LAKE CO.: Lady Lake, *Mathews s.n.* (FLAS, USF). PASCO CO.: FLA 41, ca. 2 mi. W of Blanton, *D'Arcy & Beckner s.n.* (FLAS). PINELLAS CO.: NE Clearwater, FLA 588, W of US 19, *Genetle & Fleming 372* (USF), *374* (USF), *1922* (FLAS, FSU, USF). POLK CO.: Lake Hamilton, *Conard s.n.* (FLAS); Timberlane, 8 mi. NW of Lake Wales,

Cooley 18381 (USF); 4 mi. W of Lake Wales, King s.n. (FLAS); Lake Alfred, West s.n. (FLAS).

Many thanks are due Drs. Daniel B. Ward, University of Florida, and Loran C. Anderson, Florida State University, for the opportunity to examine their specimens of Celosia. This research is supported in part by the George R. Cooley Research Fund.

LITERATURE CITED

- CORRELL, D. S., and M. C. JOHNSTON. 1970. Manual of the Vascular Plants of Texas. Texas Research Foundation, Renner. 1881 pp.
- KEAY, R. W. J. 1954. Amaranthaceae in J. Hutchinson and J. M. Dalziel, Flora of West Tropical Africa. ed. 2. London. 1(1): 145-155.
- LONG, R. W., and O. LAKELA. 1976. A Flora of Tropical Florida. rev. ed. Banyan Press, Miami. 962 pp.
- RADFORD, A. E., H. A. AHLES, and C. R. BELL. 1968. Manual of the Vascular Plants of the Carolinas. The University of North Carolina Press, Chapel Hill. 1183 pp.
- STEYERMARK, J. A. 1963. Flora of Missouri. The Iowa State University Press, Ames. 1725 pp.